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September 29, 2014

Jennifer M.V. Fitch, P.E. Project Manager Vermont Agency of Transportation 1 National Life Drive Montpelier, VT 05633

Project Name: Brookfield BRF FLBR(2)

Structure Identification: VT 65 Bridge #2 over Sunset Lake

RE: Item 900.645, "Special Provision (Fiber Reinforced Polymer Pontoons)"

NCR 11 - FRP Pontoon Stiffener Plate Alignment

Ms. Fitch -

T.Y. Lin International has reviewed Kenway's documentation dated September 26, 2014. We understand that the stiffeners on the underside of the top plate for Pontoon 7, part 7b, were misaligned by approximately 6 inches. This misalignment has created fit-up issues with the interior foam.

To fix the problem, Kenway has proposed to leave the plates as-is and reshape the foam to allow propoer fit-up.

We find the repair solution to be acceptable based on the following:

- The cross sectional properties will remain essentially unchanged;
- The volume of foam, and therefore void volume, will remain as planned;
- Plate buckling is still satisfied.

In reviewing the Project design moment diagrams on Plan sheets 36 and 37 of 70, it is recommended that the end of Pontoon 7 containing Part 7b be placed adjacent to Pontoons 9 and 10 as opposed to Pontoons 5 and 6. Since positive moment values (causing compression in the top plate) are higher near the midpoint of the floating span, this suggested arrangement will help maintain a more uniform level of reserve capacity by placing the larger unstiffened span in the lower moment region.

Please feel free to contact me with any additional questions or clarifications.

Sincerely

Josh Olund, P.E. Design Engineer

cc:

[x] Resident Engineer – Sandra Schmitt

[x] File

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